COLORBEAM®
PROFESSIONAL LED LIGHTING

User Guide

POLARIS 200 DMX Control Systems

Version 1.0 December 2010

CONTENTS

1. ITEMS INCLUDED BEFORE UNPACKING..... 2
2. INTRODUCTION..... 3
3. SPECIFICATION..... 4
4. FUNCTION SCHEMA & INSTALLATION..... 5
5. WIRING DIAGRAM..... 5
6. WARNING..... 6
7. OPERATION..... 7
8. ORDER INFORMATION.....10

ITEMS INCLUDED

Please make sure the below items were inlcuded when unpacking.
If there is anything missing, please call your local dealer immidently.

PO-200 Controller

Power cord

The shape of the power cord plug varies according to country or geographic area.

Housing Fixed Plate (2 pcs.)

Screw(8pcs.)

Wall /Floor Fixed Plate (4pcs.)

Robber Foot (4pcs.)

INTRODUCTION

COLORBEAM' s newly developed PO-200 driver system is engineered specifically for the Polaris range products. The multi-functional PO-200 can be installed on the wall, ground or embedded in the housing. Its light and handy design provides flexibility and freedom to accommodate all types of spaces with ease. Four miniaturized driver modules are linked into a main board inside PO-200, making maintenance simple and effortless.

A wide variety of lighting effects can be adjusted via the friendly interface on an easy to read LCD display. In addition to the standard DMX-512, PO-200 offers built-in functions of 10 solid colors and 6 color-changing effects to satisfy the challenging conditions form different scenarios. Master/Slave mode enables synchronized control on multiple units. Memory and timer capabilities are also included on PO-200 to further simplify setting and operation for end users.

Features:

1. Total with 5 Modes: DMX Address Setting, Operation Mode, Timer setting, Master Mode, Demo Mode
2. Simplified Installation
3. Effortless Maintenance
4. Friendly Interface
5. LCD Display
6. Various Lighting Effects.
7. Master/Slave Mode
8. Memory Capability
9. Timer Capability
10. Compact 1U standard
11. Available in 6 outputs and 8 outputs for different led color variants

SPECIFICATION

Electrical

Power Voltage: 90-264VAC, 50~60Hz
Power Consumption: 200W
Fuse : F5A / 250V (5x20mm Glass Fuse Tube)
Power Output: 6 way(RJ45)*24V/340±10mA (4 Colors)
8 way(RJ45)*24V/340±10mA (3 Colors)
Protocol: USITT DMX512-A

Communication

DMX Connecter: 5-PIN XLR
Output Connecter: RJ-45

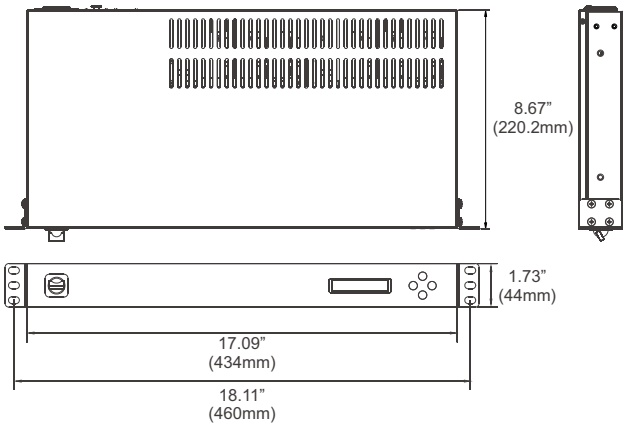
Housing

Dimension(mm): L434 × W220.2 × H44
Weight: 3 KG
Material: Metal
Color: Black

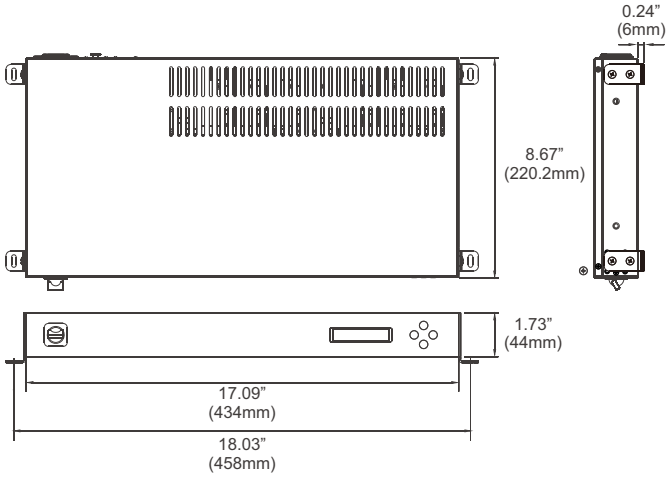
Listing

Certifications: CE / RoHS / WEEE

Dimensions



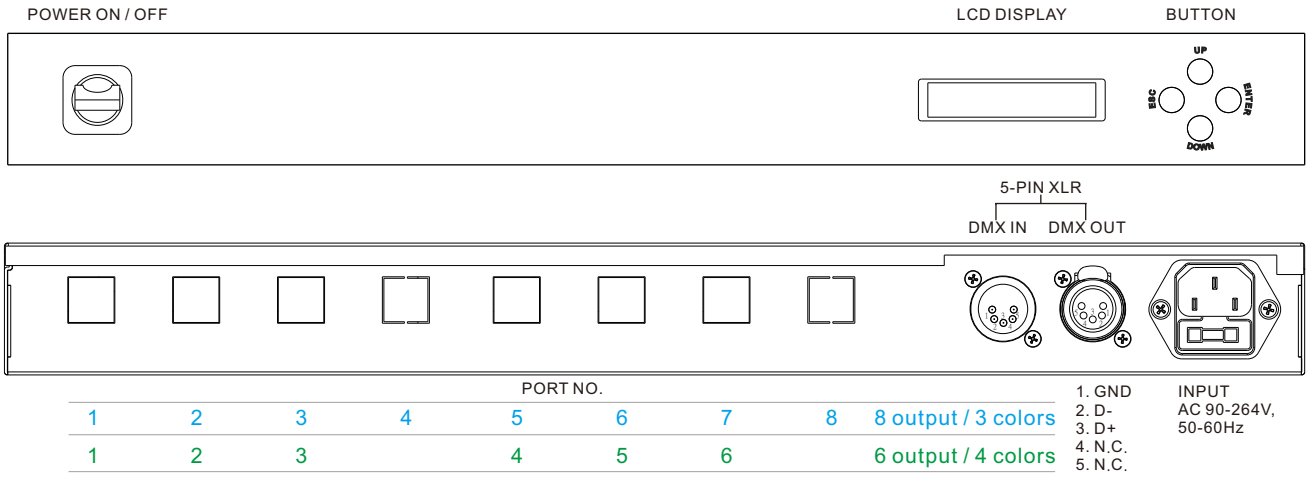
With housing fixed plate



With wall / floor fixed plate

FUNCTION SCHEMA INSTALLATION

FUNCTION SCHEMA



PORT NO.

1	2	3	4	5	6	7	8	8 output / 3 colors
1	2	3		4	5	6		6 output / 4 colors

1. GND
2. D-
3. D+
4. N.C.
5. N.C.

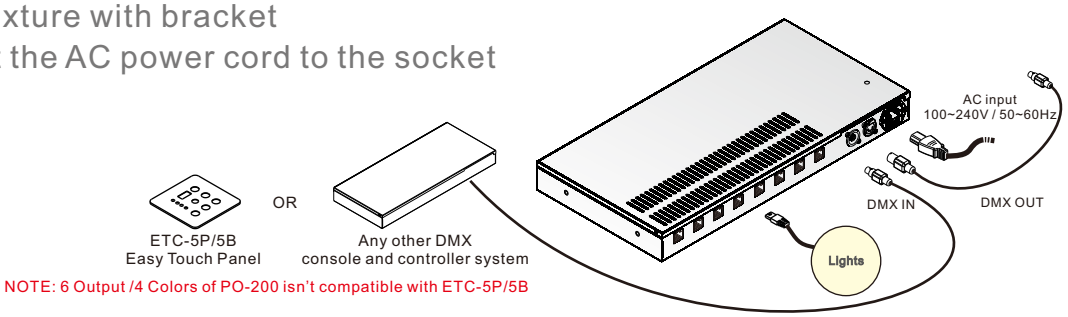
INPUT
AC 90-264V,
50-60Hz

INSTALLATION

CAUTION:

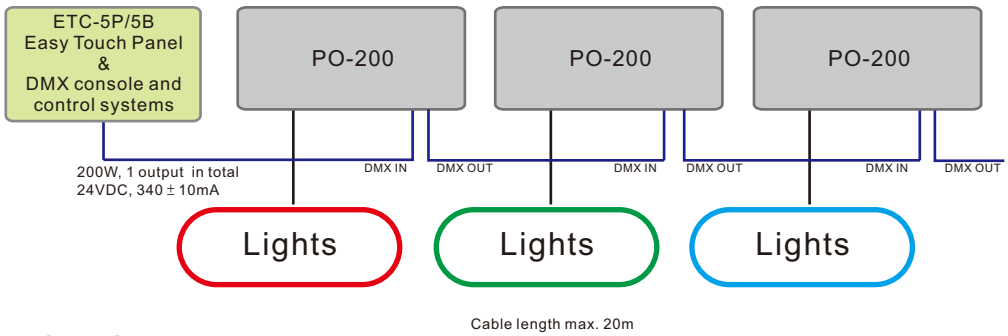
Do not hot swap. Ensure that power to the fixture is off before connecting or disconnecting fixtures.

1. Fix the fixture with bracket
2. Connect the AC power cord to the socket



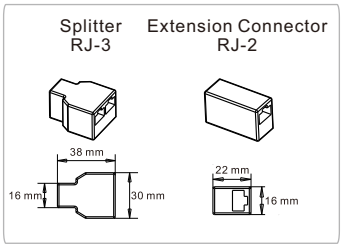
NOTE: 6 Output /4 Colors of PO-200 isn't compatible with ETC-5P/5B

WIRING DIAGRAM



Cable length max. 20m

Wiring Configuration



NOTICE:

1. Please notice the idea of the wiring for all Colorbeam fixture is in series connection.
2. The wiring of the customized is different from the commercially available. Please refer our accessory RJ-2 and RJ-3 to do the extension and the split.
3. The warranty will be invalid when the fixture is not under normal usage (including trimming the cable and do wiring by user).
   Please contact with your sales representative for the detailed information if the trimming will be happen.

WARNING

Read the instructions carefully before you install or powering!

CAUTION!
Be careful with your operations.
You can suffer a dangerous electric shock when touch the wires inside the unit.

1. Safety Instructions

Every person involved with installation and maintenance of the this device has to :
-be qualified.
-following the instructions of manual

Please make sure that there are no obvious transport damages.

Please immediately contact the local dealers as the device is in fault operation or damage.

Damages caused by the disregard of this user manual or unauthorized modification to products are not subject to warranty.

Important

Keep this driver away from rain and moisture.
Unplug mains lead before opening the housing.
Make sure the plug is tightly connected with outlet.
Make sure all connector are connected properly.
Make sure the AC power that complies with local electrical codes.
Do not expose the device to heat source, corrosive, flammable or explosive area.
Do not block any of ventilation openings.
Do not open the device and try to repair the device personally.

2. Operation Determinations

The device must only be used indoor.

CAUTION!
For non-Colorbeam fixtures, refer to the wiring diagram for installation.

If the device has been exposed to drastic temperature fluctuation, do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.

Only operate the device after having checked the housing which is firmly closed and all screws are tightly fastened. Do not shake the device. Avoid brute force when installing or operating the device.

Operate the device only after having familiarized with its functions. Do not permit operation by persons who are not qualified for operating the device. Most damages are the result of unprofessional operation!

The maximum ambient temperature 40 degree must never be exceeded.
Please consider that unauthorized modifications on the device are forbidden due to safety reasons!

OPERATION

Attention: It is import to read this manual before you install or use this product.

Primitive setting:
1. DMX Address No.: 001
2. DMX Group Mode: Independent
3. Master / Slave Mode: OFF

Press UP and DOWN to select the desired step from 1 to 4 below:

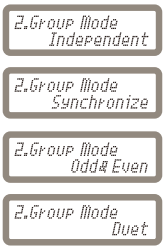
1. DMX add. Setting

For setting up DMX address, press Enter and the LCM display shows 001 twinkling. Press UP and DOWN to select the desired address from number 001-512. When finish setting, press ENTER to Exit with save or ESC to Exit without save.

2. DMX Group Mode

There are four DMX group modes, first disconnect the DMX fconnector. There are total 8 ports and can be set for different groups. Each group works individually by using DMX console. When you see Group Mode, press ENTER and the display shows independent twinkling. Press UP and DOWN to select the desired group below:

(1) Independent: Control all ports individually
(2) Synchronize: Control all ports works in same operation
(3) Odd and Even: Port in Odd numbers in one group and even numbers in the other group.
(4) Duet: Control ports by couple



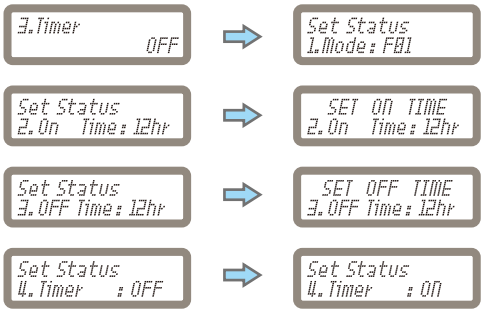
When finish, press ENTER to exit with save or ESC to exit without save.

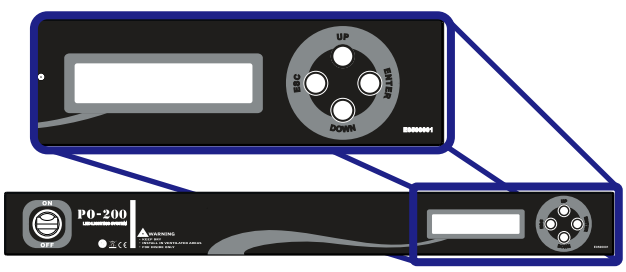
3. Timer Mode

In this function, the user can presetting turn on and turn off time for the lighting fixture. Please go to the "Timer mode" function and press Enter to start setting. The setting steps as below:

(1) After press enter to " Timer Mode", press UP or DOWN to select the mode (F01-06, C01-06) that you wish to set time. When finish select the mode, the display will twinkling. The press ENTER with save or ESC to Exit without save.
Note: For four color lighting fixture (ex: RGB+Warm white), the built in fixed color is C01-C15)

(2) "On Time" setting: When finish first step, press DOWN go to "On time" mode and press ENTER. When the display start twinkling, press UP or DOWN to select the desire number and press ENTER with save or ESC to exit without save.





OPERATION

(3) “Off Time” setting: When finish second step, press DOWN go to “Off time” mode and press ENTER. When the display start twinkling, press UP or DOWN to select the desire number and press ENTER with save or ESC to exit without save.

(4) The forth step is for turn on the Timer mode. The display will show ”Timer is” and press Enter. Then the display start twinkling, press UP or DOWN to select ”ON” or ”OFF” and press ENTER with save or ESC to exit without save. Once finish this step, there will have a colock sign appear on the display. It means the setting is complete!

4. Master Mode

This function is to choose the main control when you connect above 2 controllers. When you see Master, press ENTER and the display shows off twinkling. Press UP and DOWN to select the master on or off. When finish, press ENTER to Exit with save or ESC to Exit without save.

Note: Please pay attention for the below operation when use DMX console or Colorbeam controller as the main control. It is to avoid the signals interrupted each other.

(1) When use any DMX console as main control, please make sure the "Master Mode” is in " OFF" condition on all Colorbeam controller.

(2) When use Colorbeam controller as the main control, please make sure there is only one controller is in “ON” condition in Master Mode and others in “OFF" condition.

5. Demo Mode

Please press ENTER and there are four programs in this mode:

(1) Fixed Color: There are 10 built-in fixed colors (3 Colors) / 15 built-in fixed colors (4 Colors). Press UP and DOWN to select the desired color from C01~C10 / C15.

Note: The color illumination can be changed from 0~255 for each fixed color. To change the color illumination press ENTER button. The display now shows R255 G000 B000 (3 Colors) / R255G000B000A000 (4 Colors), the color value twinkling can be adjust from 0~255 by pressing Up and Down. To confirm and activate the color setting press Enter again to the next color setting.

3 Colors　　4 Colors

OPERATION

(2) Fade Effect: There are 6 built-in fade effects. Press UP and DOWN to select the desired effect from F01~F06.

Note: The fade time of program can be changed from 01~99% (0.5~50sec) to set the fade time press the enter button. The display shows "Decay ratio", the fade time can be adjust from 01~99% by pressing UP and DOWN. To confirm and activate time setting press enter again, or press exit to the next program.

Remark: To have the output saved and work the same output when turn on the PO-200 again, please press ENTER under the list of each C01~C15, F01~F06 and you will see "Status Saved" twinkling. The memory will stay on the latest save only.

Please note the priority of directives should be DMX signal→Demo Mode.

(3) Self Test: Press ENTER to test one color on all lighting fixtures. Press ENTER again to test the next color and so on.

(4) Reset to Initial: Press ENTER twice. The controller will return to the original setting.

★ Standby Mode

The control unit will automatically into Standby mode in the event or not receiving any instruction after 2 minutes. Under Standby mode, the control unit is functional but display is off and keypad is locked. To leave Standby mode, press and hold ENTER button for 3 seconds till display is on. When using DMX Address control the fixture, the Standby mode will start after 2 minutes. Press and hold Menu. button for 3 second to leave Standby mode.

SELECT LIST

First Layer	Second Layer	Third Layer
1. DMX Address	001~512	
2. Group Mode	Independent Synchronize Odd & Even Duet	
3. Timer Mode	Fixed Color / Fade Color On Time Off Time Turn On / Off	C01~C10 F01~F06
4. Master Mode	ON/OFF	
5. Demo Mode	Fixed Color Fade Color Self Test Reset to Initial	C01~C10 F01~F06

ORDER INFORMATION

ORDER INFORMATION FORM

CONTROLLER

ITEM		SPEC.	PART NUMBER
PO-200		8 Output / 3 Colors	GPOC0111
		6 Output / 4 Colors	GPOC0112

ACCESSORY

ITEM		SPEC.	PART NUMBER
Extended line RJ-45 two-way		5M	D03-456005-002
		10M	D03-456010-001
Extended line 5pin XLR		5M	D03-505005-003
		10M	D03-505010-001
Splitter		RJ-3	B0603-0100-1
Extension Connector		RJ-2	B0603-0100-3
Housing Fixed Plate			C01POC010701
Wall / Floor Fixed Plate			C01POC010702
Rubber Foot			E0299001
Screw		M4 x 5	E030504052

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